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0.00

JM 3-09-11

2-Deburr if necessary

QC2- Inspect parts off machine FAI/FAIB

Memo

120

QC

120

Quality Control

										DQA:	Date	:
NCR: Y	es / No				WORK ORDER NON-C	O	NFORM	MANCE / UP	DATE	QA Closed:	Date	·
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Work Orde	er:				DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
					Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo				Scrap		ı	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	No				Work Order Update]		Large Fab	Composite		Supplier	
Root				Descri	tion of work order update		nitial	Ac	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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	├	ot Conce	ntric to	^{0/5} -	BOM/Route	-	Hardwa		<u> </u>	Over/Under Part Incorre	_	Weld
	Cracks	<i>(c:</i>		-	Broken/Damaged	\vdash	1	ion Incomplete	Unaloga	Part Lost/Mi	<u> </u>	Wrong Stock Pulled
,	—	/Crimped		<u> </u>	Burrs	\vdash	Mainte	ions Incomplete/	Unclear	Part Moved	22111B [
	Cuffs	^		-	Contamination Countersink	\vdash	Mislabe		 	Positioned V	Vrong	
	Heat Tre		Tubo	-	Cut Too Short	-	Misread		-	Power Loss/	· · ·	Other
	Ripples i	on Strip in n Bond	iube	\vdash	Drill Holes	\vdash	Offset	4	L	J. Ower 1033/		Other
	$oldsymbol{oldsymbol{ o}}$	n benu Vaves in I	Evtrucia	<u>,</u>	Drawing	Out of Calibration						
	I Irorque I	vaves III I	rvei azio	''	Triawing		ا الاستان	can bracion				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde August-01-13 1		5391			*10	53	91*				٠		Page 2
Item ID: Revision ID: Item Name:	647.0115 Clip				Accept	*	N900		100)* s	etup St St	1.	IS1* IS2*
Start Date: Required Date: Reference:	8/01/13 8/01/13	Start Qty: 10.00 Req'd Qty: 10.00		*10* *10*			Cust Item I Customer:	ID:					·
Approvals:		ın:	Date:		Tooling: SPC (Y/N):			ate:		R		on	IR1* IR2*
Sequence ID/ Work Center II 130 *130* QC Quality Control	D	Operation Description QC8- Inspect parts - secon	nd check		Set Up/ Run Hours 0.00 27 9-89 0.00 3		Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. r Stamp
140 *140* Brake NC Brake NC		Form as per dwg Memo			0.00					[6			(3/09)
150 *150* QC Quality Control		QC5- Inspect part comple	eteness to step	o on W/O	0.00	DAS 27 9-89	ما			10			

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NCR:	⁄es	/ No				WORK ORDER NON-O	100	NFORM	ANCE / UP	DATE		•			€ .		
		•										QA Closed:	Da	ite:			
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	•					Use-as-is	1	•	noforming	Finishing	٦		e/Packaging		Other		
NCR I	No.					Work Order Update]		Large Fab	Composite			Supplier				
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Cause		Date	Step	Qty	(or Non-conformance	Ct	nief Eng	Desc	ription	\dashv	Date	Verificatio	n	QC Inspector		
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	<u> </u>	Centre No	ot Conce	ntric to	o/s	BOM/Route	\vdash	Hardwa	-		\dashv	Over/Under		\vdash	4 ·		
	L	Cracks			<u> </u>	Broken/Damaged	\vdash	- i '	on Incomplete		-	Part Incorred		<u> </u>	1		
		Crushed/	Crimped			Burrs	<u> </u>	4	ions Incomplete/	Unclear	_	Part Lost/Mi	ssing	<u></u>	Wrong Stock Pulled		
	<u></u>	Cuffs			<u> </u>	Contamination	Maintenance				Part Moved						
		Heat Trea	at		<u> </u>	Countersink	\vdash	Mislabe	led	L	⊣	Positioned V	- ·	Weld Wrong Stock Pulle			
1	1	Inchectio	nection Strip in Tube					Misread	1	i	- }	Power Loss/	Surge	1	lOther		

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord August-01-13				*105	391*				Page 3
Item ID: Revision ID: Item Name:	647.0115 Clip		·	Accept	*N900	<u>04</u> 010	n* s	etup Start Stop	*NS1* *NS2*
Start Date: Required Date Reference:	8/01/13 : 8/01/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item I Customer:	D:			
Approvals:	Process P	lan:	Date:	Tooling:	Da	ate:	R	un Start	*NR1*
	QC:		Date:	SPC (Y/N):	Da	ate:		Stop	*NR2*
Sequence ID/ Work Center I 160 *160* Outsource4 Outsource process		1- Black And 2- PRIME A	ze per QSI017 4.1.10.1 ATG: 2) \(\sqrt{3} \) odize as per Dwg 647.010 S PER DWG, SEE NOTE of Comformity is require	:#2	Tool ID	Tool # Plan Code			Reject Insp. Number Stamp
170 Packaging Packaging		Receive & Inspect for Da Memo	mage & Mat'l Certs	0.00				[] [3] _[1]	1/8 (1)
180 *180* QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00 3	~ P-/}		<u>/O</u>		

											DQA:	De	ate:	
NCR: Y	⁄es	/ No				WORK ORDER NON-C	O	NFORM	MANCE / UPDATE		QA Closed:		ate:	٠
						DISPOSITION			AGAINS	T DE	PARTMENT			
Work Orde	er: -					Rework	1		Skid-tube Crosstub		•	Water Jet		Engineering
Part N	۱o					Scrap Use-as-is		1	Machining Small Fa	b	l .	d. Eng. Coor re/Packaging	· \square	Quality Other
NCR I	۷o. <u>-</u>					Work Order Update		mem	Large Fab Composit	-	ince/stol	Supplier	-	
Root					Descri	ption of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Description		Date	Verification	on	QC Inspector
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	Ш	Bending				Bend		Grain		<u> </u>	Ovalized			Pressure/Forced
	Ш	Centre No	ot Conce	ntric to	o/s	BOM/Route	_	Hardwa	re		Over/Under			Temperature/Cure
	Ш	Cracks				Broken/Damaged		-1	ion Incomplete		Part Incorre			Weld
		Crushed/	Crimped			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
		Cuffs			L	Contamination		Mainte	enance		Part Moved			
ĺ		Heat Tres	. +			Countersink	1	Mislahe	eled	1	Positioned V	Vrong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Cut Too Short Drill Holes

Drawing

Finish

Folio

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ordo		5391		,	*105	391*				Page 4			
Item ID: Revision ID: Item Name: Start Date:	647.0115 Clip 8/01/13	Start Qty: 10.00 Req'd Qty: 10.00		10*	Accept	*N900		100)* s	etup Sta	I	S1* S2*	
Required Date:	. 6/01/13	Req u Qiy. 10.00		10*		Customer:		_	R	un Sta	rt 🚣 🗷 I	5 4+	
Approvals:	Process Pla	n:	Date:		Tooling: _ SPC (Y/N):		ate: ate:	J	•	Sto	i./J	R1* R2*	
Sequence ID/ Work Center II 210 *210* Packaging Packaging	D	Operation Description Identify as per dwg & Sto Memo ***IDENTIF			Set Up/ Run Hours 0.00 0.00 20 BY STAMPING P#	Tool ID AND REV***	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp DAS 33 9-89	[3-10-
²²⁰		QC21- Final Inspection -	Work Order Re	lease	0.00				A	-/11	1 12	11-0) <i>(</i>
QC		Memo			0.00				-1//	/ - 4 -	15	10 0	= /

Memo

Quality Control

pl 13-10-21

												DQA:	D	ate:	
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									•		C	(A Closed:	D	ate:	
Morle Ond						DISPOSITION				AGAINST DE	P/	ARTMENT/	PROCESS		
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raiti	۱U.	·				Use-as-is	1		noforming	Finishing	1		e/Packagin	_	Other
NCR I	۷n				;	Work Order Update	1 1		Large Fab	Composite	1	rice, stor	Supplie		
ite	•••					Work order opudie	J		20.80 . 00		ل		20,600	`	. Ц
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Cause		Date	Step	Qty	C	or Non-conformance	Ch	ief Eng	Descri	iption		Date	Verification	on	QC Inspector
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		Cracks			<u> </u>	Broken/Damaged	\vdash	4 '	on Incomplete		┥ .	art Incorrec			Weld
		Crushed/	Crimped			Burrs		4	ions Incomplete/U	Inclear	┥.	art Lost/Mis	ssing		Wrong Stock Pulled
ļ		Cuffs				Contamination	├ ─┤				Part Moved				
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1	1	Inspection Strip in Tube Cut To				Cut Too Short		Misread	1		P	ower Loss/S	Surge		Other

Offset

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

August-01-13 11:30:08 AM

Work Order ID:

105391

Parent Item:

647.0115

Parent Item Name:

Clip

Start Date: 8/01/13

Required Date: 8/01/13

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP REV:A 12.08.14 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063 2024-T3 .063 sheet	- AFAMAN	Purchased	No			110	sf	414.8989	0.0556	0.585263 . O		•	JmB-09-
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT022		414.8989							
				119	916	0.2							
				121	197	21.34			***************				
				123	096	11.4							
				123	654	11.64							
•				123	3701 ·	32.7039							
				125	341	89.44							
				125	636	248.175			125	636			

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NCR: Y	es/	/ No				WORK ORDER NON-	COI	NFORN	ANCE / UP	DATE			•
										·	QA Closed	: Date:	
Work Orde	· ·					DISPOSITION				AGAINST DE	EPARTMENT	PROCESS	
WOIK OIGE	. ·					Rework	٦		Skid-tube	Crosstube	7	Water Jet	Engineering
Part N	No.					Scrap	┪		Machining	Small Fab	Pro	od. Eng. Coor.	Quality
						Use-as-is		Therm	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	No.			·	····	Work Order Update			Large Fab	Composite]	Supplier	
Root					Descri	ption of work order update		Initial	Ac	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data									•				
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	<u> </u>	Bending			<u> </u>	Bend	\perp	Grain			Ovalized	<u> </u>	Pressure/Forced
	_	Centre N	ot Conce	ntric to	o/s	BOM/Route	<u> </u>	Hardwa		<u> </u>	Over/Unde	 	Temperature/Cure
	L	Cracks			-	Broken/Damaged	_	- '	on Incomplete	. <u> </u>	Part Incorre) —	Weld
	L	Crushed/	Crimped		<u> </u>	Burrs	\vdash	-{	ions Incomplete/	Unclear	Part Lost/N	_	Wrong Stock Pulled
	_	Cuffs			L	Contamination	_	Mainte			Part Moved		
	_	Heat Tre			<u> </u>	Countersink	_	Mislabe			Positioned		٦
	L	Inspectio	n Strip in	Tube		Cut Too Short		Misread	I	L.	Power Loss	/Surge	Other
f	1	Ripples in	n Bend		1	Drill Holes	- 1	Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	105391
Description: Bracket	Part Number:	647-0115
Inspection Dwg: 647. 0100 Rev: A		Page 1 of 1

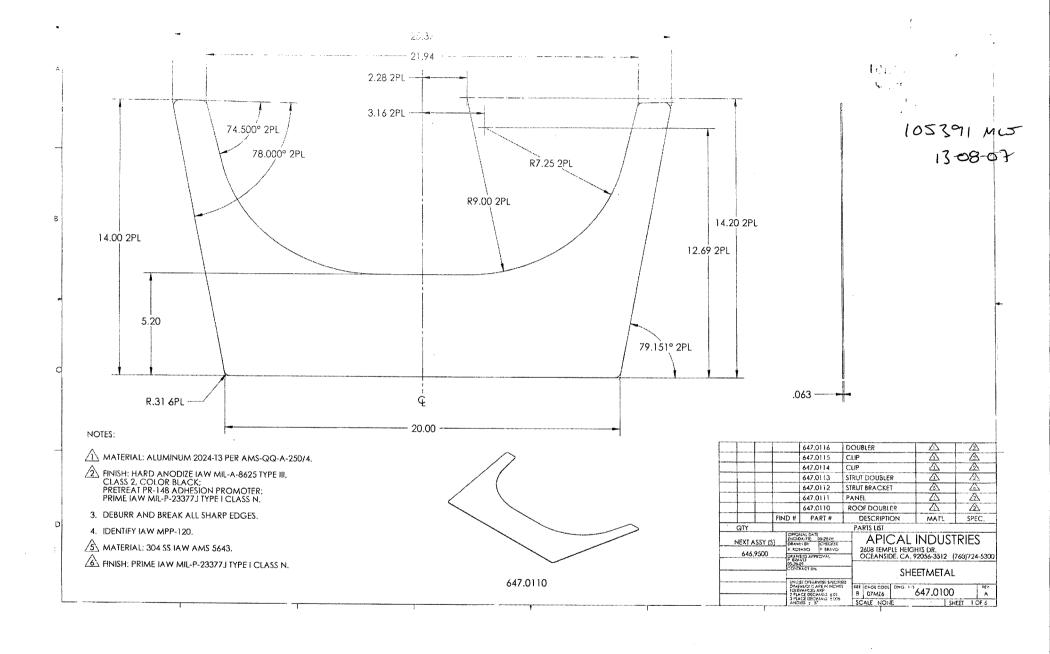
FIRST ARTICLE INSPECTION CHECKLIST

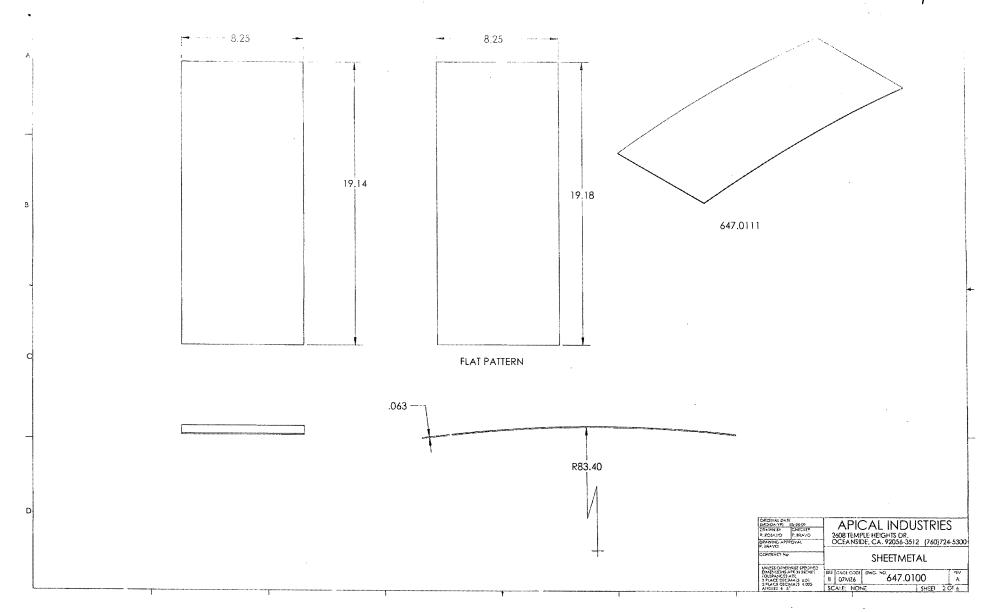
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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0.063"	L u	0.060	-		U	
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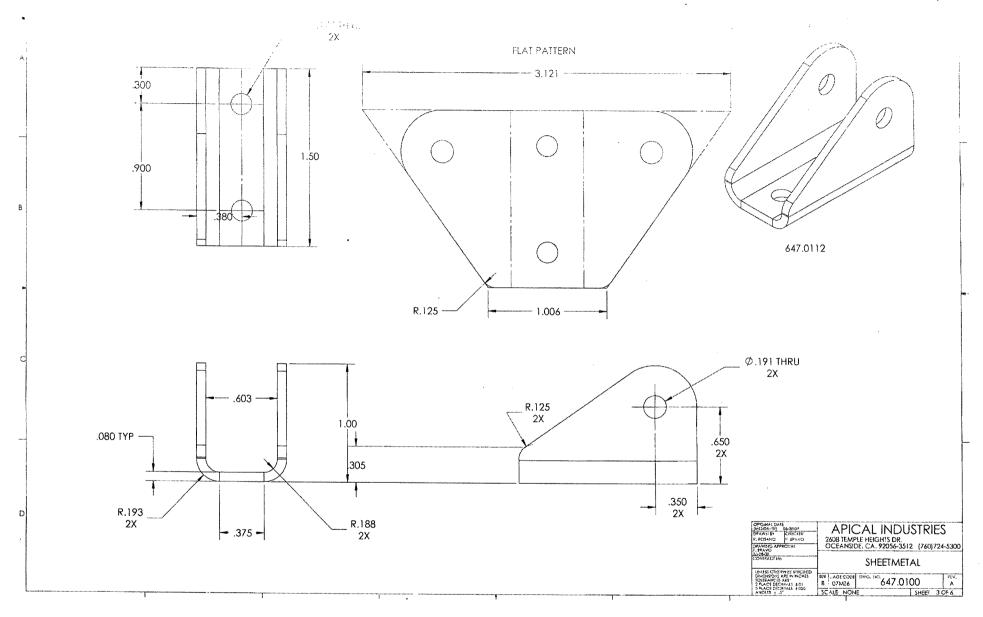
			27			
Measured by:	Im	Audited by:	9-89	,	Preliminary Approval:	
Date:	13-09-11	Date:	139/	7	Date:	

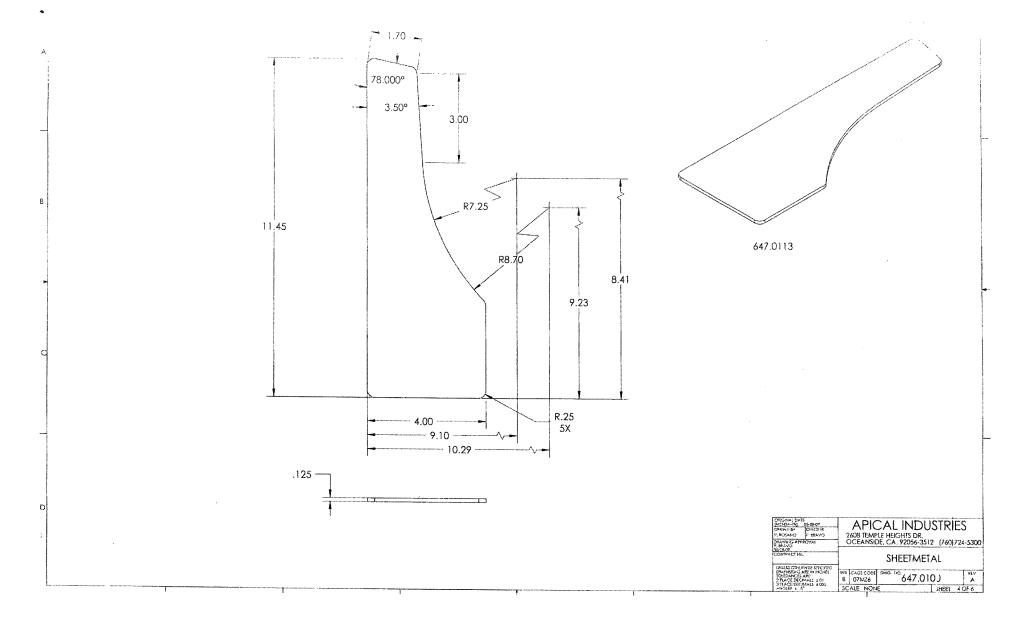
Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

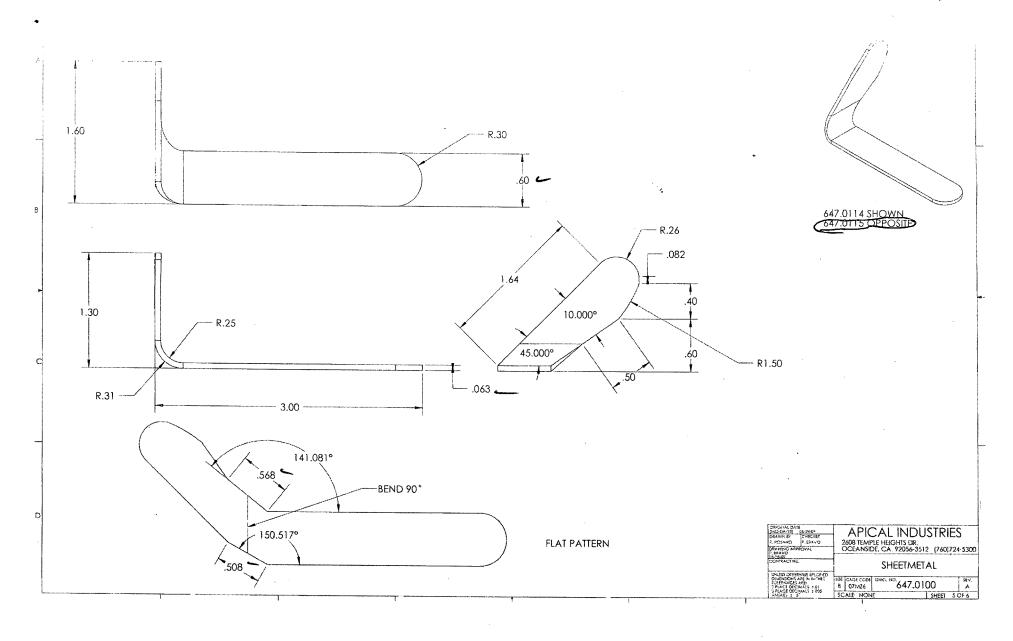
A 10.04.15

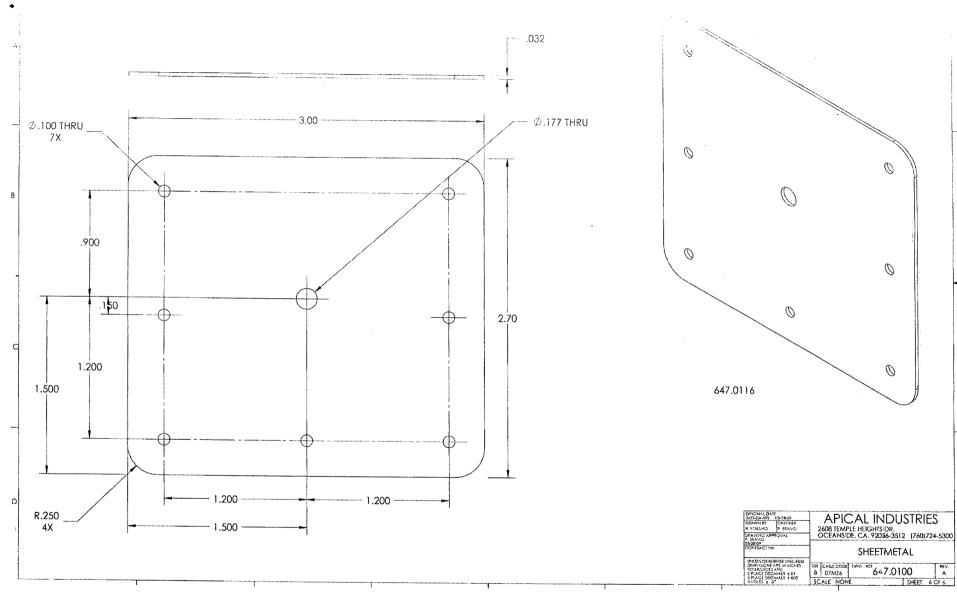














A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62691

Date: 18-Oct-13

To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

		Tax. 616 602 1166				
Terms		Ship Via				
Quantity	Description	· · · · · · · · · · · · · · · · · · ·				
1	Part: ASST		Rev:			
lot			14C ¥.			
	11 PCS 647.0114 (7.95\$EA)					
	10 PSS 647.0115 (7.95\$EA) 10 PCS 647.9613 (16.30\$EA)					
, -	10 PCS 647.9613 (16.30\$EA)					
	HARD BLACK ANODIZE					
	MIL-A-8625 TYPE III CLASS 2					
	DRIME MIL D 20277 LT/DE LOLAG					
	PRIME MIL-P-23377J TYPE I CLAS Job: 20130649	S N PO: 21431	Lima			
	000. 20100049	PU. 21431	Line:			
	Certificate of Conf	ormance				
	A.T.G. Industries certifies that all items in this shipment are in conformance					
	with all requirements, specifications and drawings referenced in the purchase order.					
	ISO 9001 : 2008 REG	ISTEDEN				
	ATG SALES-2010 TER	RMS APPLY				
	DATE: 18/10/13					
	DATE:					
	CERTIFIED SIGNATURE :					
	CERTIFIED SIGNATURE :		-			
	RECEIVER SIGNATURE :		-			
			,			